UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,390	08/14/2001	Tim Wilkinson	TRAS-510	1582

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EXAMINER
TRUONG, LECHI

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/931,390	TIM WILINSION
	Examiner	Art Unit	
	LeChi Truong	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 October 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) ☐ Other: .

DETAILED ACTION

1.   Claims 1-45 are presented for the examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2.   Claims 1, 6, 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The claim language in the following claims is not clearly understood:

i.   As to claims 1, 6, 14, it is not clearly indicated what the relationship is between an application framework and an operating system layer. What is a function of an application framework?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solomon (US. Patent 6,269,409 B1) in view of Chernyak et at (US. Patent 6,480,891 B1) and further in view of Michel Gien (Next Generation Operating Systems Architecture).

4.   **As to claim 1**, Solomon teaches the invention substantially as claimed including: an

operating system (multiple operating system, col 3, ln 43-60/ Fig. 3), layer (layer, col 3, ln 43-

60), a first operating system (Window NT OS, col 3, ln 43-60/ Fig. 3), an operation system

abstraction layer (software abstraction layer 320, col 3, ln 53-60/ Fig. 3/ col 4, ln 40-55),

interface (interface, col 3, ln 53-60), platform dependent code (platform dependent code, col 4, ln

25-32), Unix (operating system 306 is a UNIX operating system, col 3, ln 44-50/ Fig. 3),

programming environment(virtual machine system, col 1, ln 15-20), application frame work(col

1, ln 18-20).

5.   Solomon does not teach a client software program, embedded computing device.

However, Chernyak teaches a client software program, embedded computing device(ATM

embedded device, LMA device, col 3, and ln 5-20).

6.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Solomon and Chernyak because Chernyak's ATM

embedded device, LMA device would convert configuration data from one version to another.

7.   Solomon and Chernyak do not explicit teach the operating system Unix as independent

operating system. However, Michel teaches Unix as independent operating system   (independent

operating system, sec: Standard operating system components, line 3-4).

8.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Solomon, Chernyak and Michel because Michel's Unix as

independent operating system would provide more portability and increasing efforts to

implement on new platforms.

9.   **As to claim 2,** Solomon teaches second platform dependent code to a second operation

system (col 2, ln 5-8).

10.   **As to claim 3,** Solomon teaches the first/ second platform is installed on the embedded

computing device (col 6, ln 25-30).

11.   **As to claim 4,** Solomon teaches the first processor/ second processor, exchanging the

first processor with a second processor (multiprocessor communication, col 4, ln 20-25).

12.   **As to claim 5,** Solomon teaches abstraction layer is configured to interface between

platform independent code and second platform dependent code (col 3, ln 55-60/ col 5, ln 5-8).

13.   Claims **6-13, 23-45** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Solomon (US. Patent 6,269,409 B1), Chernyak et at (US. Patent 6,480,891 B1), Michel Gien

(Next Generation Operating system Architecture) as applied to the claim 1 above and further in

view of Daswani et al (6,477,565 B1).

14.   **As to claim 6,** it is an apparatus claim of claim 1; therefore, it is rejected for the same

reason as claim 1 above. In additional, Solomon, Chernyak and Michel do not explicit teach a

type converter module for translating complex content to simplified content, the client software

program is configured to receive the simplified content from the client support server for

processing the simplified content. However, Daswani teaches a protocol converter module for

mapping at least one complex protocol to a simplified protocol (col 3, ln 52-60/ col 8, ln 53-55

and ln 59-65), wherein the client software program is configured to receive and use the

simplified protocol (col 3, ln 20-25/ col 14, ln 57-60/ col 15, ln 30-34).

15.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Solomon, Chernyak, Michel and Daswani because

Daswani's a protocol converter module for mapping at least one complex protocol to a simple

protocol would provide a communication device for accessing and receiving data packets

without requiring hardware or software modifications to such devices.

16.   **As to claim 7,** Daswani teaches a protocol converter module for mapping at least one

complex protocol to a simplified protocol (col 3, ln 52-60/ col 8, ln 53-55 and ln 59-65), wherein

the client software program is configured to receive and use the simplified protocol (col 3, ln 20-

25/ col 14, ln 57-60/ col 15, ln 30-34).

17.   **As to claim 8,** Daswani teaches a package manager (data center 37, col 8, ln 13-14/ Fig.

2), a package repository (repository 31, col 8, ln 9-10), package manger is configured to

communication with the package repository for receiving package data for running a software

package (col 8, ln 9-14).

18.   **As to claim 9,** Daswani teaches the package manager is configured to compare the

package registry with package data needed to run the software package and to communication

with the package repository for receiving the package data (col 11, ln 25-30 and ln 35-40).

19.   **As to claims 10, 11,** they are apparatus claims of claims 8, 9; therefore, they are rejected

for the same reasons as claims 8, 9 above.

20.   **As to claim 12,** Solomon teaches an operating system abstraction layer (software

abstraction layer 320, col 3, ln 53-60/ Fig. 3/ col 4, ln 40-55), platform independent code

(operating system 306, col 3, ln 44-50/ Fig. 3), platform dependent code (platform dependent

code, col 4, ln 25-32), abstraction layer is configured to interface between platform independent

code and second platform dependent code (col 3, ln 55-60/ col 5, ln 5-8).

21   **As to claim 13,** it is an apparatus claim of claim 2; therefore, it is rejected for the same

reason as claim 2 above.

22.   **As to claim 23,** it is an apparatus claim of claim 6; therefore, it is rejected for the same

reason as claim 6 above.

23.   **As to claim 24,** Chernyak teaches simplified content translated from the complex content

(col 7, ln 1-5/ ln 21-27).

24.   **As to claim 25,** it is an apparatus claim of claim 7; therefore, it is rejected for the same

reason as claim 7 above.

25.   **As to claim 26,** Solomon teaches a programming environment using platform

independent code (a UNIX operating system, col 7, ln 25-37), converting (translation, col 7, ln

25-37), an operating abstraction interface (the software abstraction layer, col 7, ln 25-37),

operating system running platform dependent code (the Windows NT operating system, col 7, ln

25-37).

26.   **As to claims 27, 28,** 29, 30, they are apparatus claims of claims 23, 24, 7, 26; therefore,

they are rejected for the same reasons as claims 23, 24, 7, 26 above.

27.   **As to claim 31,** it is an apparatus claim of claim 23; therefore, it is rejected for the same

reason as claim 23 above. In additional, Daswani teaches the package repository (repository 31,

col 8, ln 8-12/ Fig. 1)

28.   **As to claim 32,** Daswani teaches a feature request to the repository, transferring the

package metadata from the package repository to the client (col 8, ln 8-14).

29. **As to claim 33,** it is an apparatus claim of claim 30; therefore, it is rejected for the same reason as claim 30 above.

30. **As to claims 34-37,** they are apparatus claims of claims 31-33; therefore, they are rejected for the same reasons as claims 31-33 above.

31. **As to claim 38,** it is an apparatus claim of claim 31; therefore, it is rejected for the same reason as claim 31 above. In additional, Daswani teaches a package manager (data center 37, col 8, ln 13-14/ Fig. 2)

32. **As to claims 39, 40, 41, 42,**they are apparatus claims of claims 28, 32, 7, 38; therefore, they are rejected for the same reasons as claims 28, 32, 7, 38 above.

33. **As to claims 43, 44, 45,** they are apparatus claims of claims 27, 28; therefore, they are rejected for the same reasons as claims 27, 28 above.

34. Claims **14-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Daswani et al (6,477,565 B1) in view of Solomon (US. Patent 6,269,409 B1)

35. **As to claim 14,** Daswani teaches an application framework (layer 55, col 10, ln 25-28/ Fig. 2), client software program (notebook computer 41, a cellular telephone 43, col 6, ln 15-18/ Fig. 1/ appliances 39-43, col 6, ln 58-60/ layer 57, Fig.2), a client support server (server 33, col 6, ln 56-58/ Fig. 1), the client software program is configured to interface with a client support server (col 6, ln 56-60); a protocol converter module for mapping at least one complex protocol to a simplified protocol (col 3, ln 52-60/ col 8, ln 53-55 and ln 59-65), wherein the client

software program is configured to receive and use the simplified protocol(col 3, ln 20-25/ col

14, ln 57-60/ col 15, ln 30-34).

36.   Daswani does not explicit teach an operating system layer including a fist operating

system, a programming environment. However, Solomon teaches a first operating system / a

programming environment (Window NT OS, col 3, ln 43-60/ Fig. 3), an operation system layer

(col 3, ln 53-60/ Fig. 3/ col 4, ln 40-55).

37.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Daswani and Solomon because Solomon's an operating

system layer would improve the method for concurrently executing multiple operating systems.

38.   As to claim 15, Daswani teaches a package manager (data center 37, col 8, ln 13-14/ Fig.

2), a package repository (repository 31, col 8, ln 9-10), package manger is configured to

communication with the package repository for receiving package data for running a software

package (col 8, ln 9-14).

39.   As to claim 16, Daswani teaches the package manager is configured to compare the

package registry with package data needed to run the software package and to communication

with the package repository for receiving the package data (col 11, ln 25-30 and ln 35-40).

40.   As to claim 17, Solomon the teaches a first operating system (Window NT OS, col 3, ln

43-60/ Fig. 3), an operation system abstraction layer (software abstraction layer 320, col 3, ln 53-

60/ Fig. 3/ col 4, ln 40-55), interface (interface, col 3, ln 53-60), platform dependent code

(platform dependent code, col 4, ln 25-32), platform independent code (operating system 306,

col 3, ln 44-50/ Fig. 3).

41.   **As to claim 18,** Solomon teaches second platform dependent code to a second operation

system (col 2, ln 5-8).

42.   **As to claims 19, 20, 21, 22,** they are apparatus claims of claims 14, 15, 16, 17, 18;

therefore, they are rejected for the same reasons as claims 14, 15, 16, 17, 18 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The

examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR of Public PAIP. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP

system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

January 28, 2005

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